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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Peter Klaptchuk

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EXAMINER

ZIMMER, ANTHONY J

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,680	Applicant(s) KLAPTCHUK, PETER	
	Examiner ANTHONY J. ZIMMER	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 9-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 30 and 31 is/are rejected.
- 7) ☒ Claim(s) 7-8 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHILDRESS '390 in view of DENVIR '625.

CHILDRESS teaches a method of roasting raw seeds or nuts by placing nuts or seeds in a microwave oven in a package and cooking (subjecting to microwaves), which then produces steam in the package from the moisture in the seeds (in other words, subjecting the seeds to microwaves and steam). See column 4, lines 7-65. Since the microwaves are intended to roast the seeds in CHILDRESS for human consumption it would have been obvious to one of ordinary skill in the art to use the microwaves and steam in CHILDRESS to heat the seeds to a roasting temperature (a temperature

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effective in inactive seeds). Also, CHILDRESS teaches that temperatures in a microwave can get as high as 350-450°C, (see column 3, lines 31-33) thus the microwaves produced (and steam produced as a result) in such an oven are operative (capable) to heat the seed sample to such a temperature which is effective to inactivate seeds in the seed sample.

CHILDRESS does not teach subjecting the seed sample to ozone.

However, CHILDRESS teaches using raw seeds (See column 4, lines 28-32) intended for consumption. It is common knowledge that agricultural foods commonly contain microorganisms (pathogenic organisms) and/or toxins (herbicides or pesticides) that can be harmful to the health of the consumer and can lead to the spoiling of food. Thus, it would have been obvious to one of ordinary skill in the art to modify CHILDRESS in view of DENVIR, as DENVIR teaches a process of decontaminating agricultural products with ozone. See column 5, lines 28-42 of DENVIR. In particular DENVIR teaches treating seeds with ozone to decontaminate foods exposed to toxins and microorganisms. See column 1, lines 13-18 of DENVIR. DENVIR teaches using an ozone concentration of 10 wt. %, see Example 1, which is seen as a concentration operative to significantly degrade herbicides and pesticides and operative to substantially inactivate all pathogenic organisms present, as it is well above the concentration of 100-5000 ppm which is seen as being effective in the instant specification (page 8, lines 6-11).

Furthermore, the preamble statement, “to prevent germination of seeds in the sample and to render seeds in the seed sample safe for disposal,” is a matter of

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intended use. See MPEP 2111.02. As discussed above, the temperature of CHILDRESS and the ozone concentration of DENVIR are operative to prevent germination and render seeds safe for disposal. Thus, process limitations implied by the statement are considered to be met.

One of ordinary skill in the art would have been motivated to modify CHILDRESS in view of DENVIR in order to produce a food product containing fewer toxins or in order to prevent the food product from spoiling. See column 1, lines 13-18 of DENVIR.

In regard to claim 2, CHILDRESS, does not teach a particular temperature.

However, it would have been obvious to one of ordinary skill in the art to use a temperature of higher than 95°C, as CHILDRESS teaches heating seeds in a microwave oven, and also teaches that temperatures of 350-450°C are typically encountered in such a microwave oven, and therefore it would be obvious to use such temperatures. See column 3, lines 29-35. Furthermore, in regard to claim 2, the microwaves (and steam) in CHILDRESS are operative (capable) to heat the seed sample to a treatment temperature of 95°C, as a microwave oven such as those used is operative to heat to temperatures of 350-450°C.

In regard to claim 3, CHILDRESS teaches the time of exposing the seeds to microwaves and steam determines the texture. See column 4, lines 63-65 of CHILDRESS. Thus the particular time chosen is a matter of design choice and routine optimization.

In regard to claim 4, neither DENVIR nor CHILDRESS teach an ozone concentration of 10-5000 ppm.

However, the concentration of ozone is well known to affect cost and quality of treatment. Therefore, the concentration of ozone is a matter of design choice and routine optimization that fails to produce an unexpected result.

In regard to claim 5, DENVIR and CHILDRESS do not teach Malathion, 2, 4,-D or thiamethoxam.

However, Malathion, 2, 4,-D and thiamethoxam are commonly used pesticides on plants containing seeds, and thus it would have been obvious to one of ordinary skill in the art to subject contaminated seeds to ozone decontamination treatment.

In regard to claim 6, DENVIR teaches decontaminating food products with spoiling microorganisms (see column 1, lines 13-18). Well known microorganisms include bacteria and fungi. Thus it would have been obvious to one of ordinary skill in the art to subject seeds contaminated with such microorganisms to ozone treatment.

In regard to claim 30, genetically modified seeds were well known and readily available at the time of the invention, thus it would have been obvious to one of ordinary skill in the art to use such seeds as the seeds in the process obviated above, in order to affect the predictable result of roasting seeds.

In regard to claim 31, it is common practice to compost unused foodstuff, and thus it would have been obvious to one of ordinary skill in the art to compost the above discussed seeds in order to affect the predictable result of forming compost.

Allowable Subject Matter

Claims 7-8 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: In regard to claims 7 and 8, the examiner agrees with applicant's argument spanning pages 14-16 that one of ordinary skill would not include ozone in the bag of Childress (thus allowing simultaneous ozone and microwave/steam treatment or microwave/steam followed by ozone treatment) because DENVIR warns against long exposure times which are intended in Childress.

In regard to claim 29, the prior art does not teach or suggest breaking open seeds prior to treatment, and this process step is not seen as being an obvious variant. In fact, Childress teaches unshelled, unbroken seeds. See column 4, lines 28-29.

Response to Arguments

Applicant's arguments filed 5/12/2008 in regard to claims 1-6 and 30-31 have been fully considered but they are not persuasive.

Applicant argues that both Childress and Denvir are directed to processes in which the products must not be damaged, and thus Childress and Denvir teach away from the instant process.

However, it is noted that the features upon which applicant relies (i.e., damaging or destroying the product) are not recited in the rejected claim(s). Although the claims

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are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further, the temperatures disclosed in Childress are operative to inactivate the seed sample and the ozone concentrations of Denvir are operative to degrade herbicides and pesticides. Thus, the limitations of claim 1 are met.

Applicant argues that Childress is not treating raw seeds and thus there would be no motivation to use the ozone process of Childress.

However, the seeds (or shell nuts) in Childress are raw (see column 4, lines 28-29). Furthermore, before packaging, one of ordinary skill in the art would have been motivated to use the ozone process of Denvir to prepare the seeds for packaging in order to provide seeds safe for human consumption and in order to increase shelf life by degrading organisms and pathogens.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY J. ZIMMER whose telephone number is (571)270-3591. The examiner can normally be reached on Monday - Friday 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ajz

/Steven Bos/
Primary Examiner, Art Unit 1793